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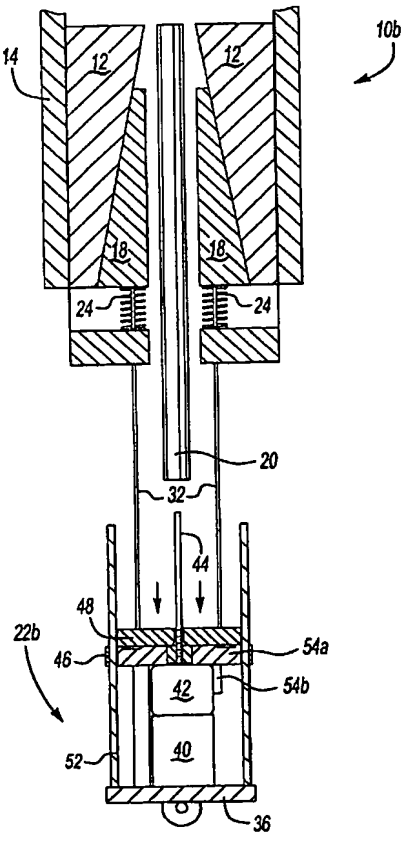
(54) Title: REMOTELY RESETTABLE ROPELESS EMERGENCY STOPPING DEVICE FOR AN ELEVATOR



(57) Abstract: A brake mechanism (10) for an elevator (2) is activated in response to an electronic control signal to prevent movement of an elevator car (16) under predetermined conditions. The brake mechanism is preferably a safety mechanism (10) and does not require a governor sheave, a governor rope, or a tension sheave. The safety mechanism in one disclosed example utilizes a solenoid actuator (22b) and an electric motor (40) and gear box assembly (42) to move safety wedges (18) into engagement with a guide rail (20) to stop the elevator car (16). The safety wedges (18) are held in a non-deployed position during normal elevator operation. If there is a power loss or if elevator car speed exceeds a predetermined threshold, an electronic control signal activates the safety mechanism (10) causing the solenoid to release, which causes the safety wedges (18) move in a direction opposite to that of a safety housing (12) mounted for movement with the elevator car (16). Angled surfaces of the safety housing (12) force the safety wedges (18) into engagement with the guide rail (20). The safety mechanism (10) can be selectively reset from a remote location.

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